

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference PCT 320	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/KR 2004/000483	(Earliest) Priority Date (<i>day/month/year</i>) 28 March 2003 (28.03.2003)	International filing date (<i>day/month/year</i>) 8 March 2004 (08.03.2004)
Applicant <div style="text-align: center;">KOREA INSTITUTE OF ENERGY RESEARCH</div>		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☒ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
- b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see continuation of this first sheet.

2. ☐ Certain claims were found unsearchable (see continuation of this first sheet)

3. ☐ Unity of invention is lacking (see continuation of this first sheet)

4. With regard to the title,

- ☒ the text is approved as submitted by the applicant.
- ☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

- ☒ the text is approved as submitted by the applicant.
- ☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in the continuation of this first sheet. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

- a. the figure of the drawings to be published with the abstract is Figure No. 3
- ☒ as suggested by the applicant.
- ☐ as selected by this Authority, because the applicant failed to suggest a figure.
- ☐ as selected by this Authority, because this figure better characterizes the invention.
- b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR 2004/000483

A. CLASSIFICATION OF SUBJECT MATTER

C11C 3/10, 3/04; C07C 67/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

C11C; C07C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI, EPODOC, PAJ, DEPATISNET

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	AT 406870 B (SUCHER & HOLZER BAUPLANUNGS- UND HANDELSGESELLSCHAFT M.B.H.) 25 October 2000 (25.10.2000) <i>abstract; claims.</i>	1-21
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X	WO 1995/002661 A2 (VOGEL & NOOT INDUSTRIEANLAGEBAUBGESELLSCHAFT MBH) 26 January 1995 (26.01.1995) <i>page 2, last paragraph; page 5, first paragraph; example; claims.</i>	1-21
	--	
X	WO 1993/009212 A1 (WIMMER Theodor) 13 May 1993 (13.05.1993) <i>abstract; examples; claims.</i>	1-21
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☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
10 May 2004 (10.05.2004)Date of mailing of the international search report
24 August 2004 (24.08.2004)Name and mailing address of the ISA/ AT
Austrian Patent Office
Dresdner Straße 87, A-1200 Vienna

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR 2004/000483

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	AT 386222 B (JUNEK HANS) 25 July 1988 (25.07.1988) <i>abstract; claims.</i>	1,2,4,5,7,8,11,1 2,15-20
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X	GB 612667 A (LEVER BROTHERS & UNILEVER LIMITED) 16 November 1948 (16.11.1948) <i>claims; figs.</i>	1,2,4, 5, 7, 8
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X	US 5116546 A (Robert Klock et al.) 26 May 1992 (26.05.1992) <i>abstract; examples; claims.</i>	1-10
	--	
X	EP 0523767 A2 (METALLGESELLSCHAFT Aktiengesellschaft) 20 January 1993 (20.01.1993) <i>abstract; example; claims; fig. 1.</i>	1-10
	--	
X	EP 0535290 A1 (EVVA-SCHMIERMITTEL-FABRIK GESELLSCHAFT m.b.H. Nfg. KG) 7 April 1993 (07.04.1993) <i>claims; fig.</i>	1-10
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X	AT 394 374 B (WIMMER THEODOR) 25 March 1992 (25.03.1992) <i>abstract.</i>	1,4,5,7,11,15,16 ,18
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X	EP 0562504 A2 (OELMÜHLE LEER CONNEMANN GmbH & Co.) 29 September 1993 (29.09.1993) <i>claims; fig.</i>	1,4,5,7
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X	EP 0127104 A1 (Henkel Kommanditgesellschaft auf Aktien) 5 December 1984 (05.12.1984)) <i>examples; claims.</i>	1,4,5,7

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/KR 2004/000483

Patent document cited in search report			Publication date	Patent family member(s)	Publication date
AT	A	386222		none	
AT	A	394374		none	
AT	A	406870		none	
EP	A	127104		DE D 3462698D	1987-04-23
				MY A 27887	1987-12-31
				PH A 19123	1986-01-08
				US A 4608202	1986-08-26
				GB A 2140817	1984-12-05
				EP A 0127104	1984-12-05
EP	A	523767		DK T 523767T	1996-01-29
				ES T 2083068T	1996-04-01
				EP A 0523767	1993-01-20
				DE D 59204655D	1996-01-25
				DE A 4123928	1993-01-21
				AT T 131469T	1995-12-15
EP	A	535290		GR T 3014904T	1995-05-31
				ES T 2065666T	1995-02-16
				EP A 0535290	1993-04-07
				DE D 59103713D	1995-01-12
EP	A	562504		PL B 171878B	1997-06-30
				DK T 562504T	1996-03-04
				US A 5354878	1994-10-11
				PL A 298214	1994-01-24
				ES T 2081152T	1996-02-16
				EP A 0562504	1993-09-29
GB	A	612667	1948-11-16	none	
US	A	5116546	1992-05-26	AT T 99280T	1994-01-15
				DK T 391485T	1994-04-11
				ES T 2062293T	1994-12-16
				EP A 0391485	1990-10-10
				DE T 69005501T	1994-05-11
WO	A	19930092 12		none	
WO	A	19950026 61		none	